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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/918,277	07/30/2001	Ronen Ofek	2681/OJ660	2409
25937	7590	04/04/2006	EXAMINER	
ZARETSKY & ASSOCIATES PC 8753 W. RUNION DR. PEORIA, AZ 85382-6412			PHAN, HANH	
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			2613	

DATE MAILED: 04/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

<b>Office Action Summary</b>	<b>Application No.</b> 09/918,277	<b>Applicant(s)</b> OFEK ET AL.	
	<b>Examiner</b> Hanh Phan	<b>Art Unit</b> 2613	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 17 January 2006.
- 2a) ☐ This action is FINAL.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-43 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-43 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)  | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

### **DETAILED ACTION**

1. This Office Action is responsive to the Amendment filed on 01/17/2006.
2. The indicated allowability of claims 6, 19 and 27-39 is withdrawn in view of the newly discovered reference(s) to Azuma et al (US Patent No. 6,430,150), Coan et al (US Patent No. 5,093,824) and Mueller (US Patent No. 6,198,721). Rejections based on the newly cited reference(s) follow.

### ***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claims 1-8, 10-21, 23-34 and 36-43 are rejected under 35 U.S.C. 103(a) as being unpatentable over Azuma et al (US Patent No. 6,430,150) in view of Coan et al (US Patent No. 5,093,824) and further in view of Mueller (US Patent No. 6,198,721).

Regarding claims 1, 14, 27 and 40, referring to Figures 1A, 1B, 5A and 6, Azuma teaches a method of determining a protection route in a network for links having working channels associated therewith, the method comprising the steps of:

removing from consideration all logical links having a working channel other than that of the link to be protected to generate a single channel logical topology (from col. 3, line 60 to col. 9, lines 15).

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removing from consideration the link to be protected from the single channel logical topology (from col. 3, line 60 to col. 9, line 15); and

generating a restoration path for the link to be protected from the single color logical topology only (from col. 3, line 60 to col. 9, line 15).

Azuma differs from claims 1, 14, 27 and 40 in that he does not specifically teach a network for links having wavelength division multiplexing color associated therewith. However, Coan in US Patent No. 5,093,824 teaches a network for links having optical channel associated therewith (Figures 1-6, col. 1, lines 30-56, and from col. 3, line 40 to col. 6, line 34) and Mueller in US Patent No. 6,198,721 teaches a network for links having wavelength division multiplexing (Figures 2-4, col. 3, lines 15-67 and col. 4, lines 1-65). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the network for links having wavelength division multiplexing color associated therewith as taught by Coan and Mueller in the system of Azuma. One of ordinary skill in the art would have been motivated to do this since Coan suggests in column 1, lines 30-56, and from col. 3, line 40 to col. 6, line 34 and Mueller suggests in column 3, lines 15-67 and col. 4, lines 1-65 that using such the network for links having wavelength division multiplexing color associated therewith has advantage of allowing providing an optical communication system with high capacity and high speed.

Regarding claims 2, 15 and 28, the combination of Azuma, Coan and Mueller teaches further comprising the step of configuring one or more nodes in the network in

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accordance with the restoration path (from col. 3 of Azuma, line 60 to col. 9, line 15 and from col. 3 of Coan, line 40 to col. 6, line 34).

Regarding claims 3, 16 and 29, the combination of Azuma, Coan and Mueller teaches the links share the same optical fiber using WDM (from col. 3 of Azuma, line 60 to col. 9, line 15 and from col. 3 of Coan, line 40 to col. 6, line 34, Figs. 2-4 of Mueller).

Regarding claims 4, 17 and 30, the combination of Azuma, Coan and Mueller teaches the links span more than a single fiber utilizing WDM means (from col. 3 of Azuma, line 60 to col. 9, line 15 and from col. 3 of Coan, line 40 to col. 6, line 34, and Figs. 2-4 of Mueller).

Regarding claims 5, 18 and 31, the combination of Azuma, Coan and Mueller teaches the logical topology comprises the topology of the links of the network (from col. 3 of Azuma, line 60 to col. 9, line 15 and from col. 3 of Coan, line 40 to col. 6, line 34, and Figs. 2-4 of Mueller).

Regarding claims 6, 19 and 32, the combination of Azuma, Coan and Mueller teaches the step of assigning a virtual color to each link equal to its physical color (from col. 3 of Azuma, line 60 to col. 9, line 15 and from col. 3 of Coan, line 40 to col. 6, line 34 and Figs. 2-4 of Mueller).

Regarding claims 7, 20 and 33, the combination of Azuma, Coan and Mueller teaches generating the restoration path comprises executing a routing algorithm capable of generating a route based on the single color logical topology (from col. 3 of Azuma, line 60 to col. 9, line 15 and from col. 3 of Coan, line 40 to col. 6, line 34 and Figs. 2-4 of Mueller).

Regarding claims 8, 21 and 34, the combination of Azuma, Coan and Mueller teaches the routing algorithm is chosen from the group comprising Dijkstra, Breadth First Search (BFS) and Depth Search First (DFS) (col. 4 of Azuma, lines 60-61).

Regarding claims 10, 23 and 36, the combination of Azuma, Coan and Mueller further teaches the step of configuring comprises utilizing a network-management protocol such as SNMP (from col. 3 of Azuma, line 60 to col. 9, line 15 and from col. 3 of Coan, line 40 to col. 6, line 34).

Regarding claims 11, 24, 37 and 41, the combination of Azuma, Coan and Mueller further teaches the method is implemented in a Network Management System (NMS) (from col. 3 of Azuma, line 60 to col. 9, line 15 and from col. 3 of Coan, line 40 to col. 6, line 34).

Regarding claims 12, 25, 38 and 42, the combination of Azuma, Coan and Mueller further teaches the method is implemented in nodes within the network (Fig. 6 of Azuma).

Regarding claims 13, 26, 39 and 43, the combination of Azuma, Coan and Mueller further teaches the step of switching traffic to the restoration path associated the link failure in the event of a link failure (from col. 3 of Azuma, line 60 to col. 9, line 15 and from col. 3 of Coan, line 40 to col. 6, line 34).

5. Claims 9, 22 and 35 are rejected under 35 U.S.C. 103(a) as being unpatentable over Azuma et al (US Patent No. 6,430,150), Coan et al (US Patent No. 5,093,824) in

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view of Mueller (US Patent No. 6,198,721) and further in view of Kang et al (Pub. No.: US 2002/0089712 A1).

Regarding claims 9, 22 and 35, the combination of Azuma, Coan and Mueller teaches all the aspects of the claimed invention except fails to teach the step of configuring comprises utilizing a signaling protocol chosen from the group comprising Reservation Protocol with Traffic Extensions (RSVP-TE) and Constraint based Label Distribution Protocol CR-LDP). However, Kang teaches the step of configuring comprises utilizing a signaling protocol chosen from the group comprising Reservation Protocol with Traffic Extensions (RSVP-TE) and Constraint based Label Distribution Protocol CR-LDP) (page 2, paragraph [0043]). Therefore, it would have been obvious to one having skill in the art at the time the invention was made to incorporate the step of configuring comprises utilizing a signaling protocol chosen from the group comprising Reservation Protocol with Traffic Extensions (RSVP-TE) and Constraint based Label Distribution Protocol CR-LDP) as taught by Kang in the system of the combination of Azuma, Coan and Mueller. One of ordinary skill in the art would have been motivated to do this since Kang suggest in page 2, paragraph [0043] that using such the step of configuring comprises utilizing a signaling protocol chosen from the group comprising Reservation Protocol with Traffic Extensions (RSVP-TE) and Constraint based Label Distribution Protocol CR-LDP) have advantage of allowing configuring an actual optical path.

***Response to Arguments***

6. Applicant's arguments with respect to claims 1-43 have been considered but are moot in view of the new ground(s) of rejection.

***Conclusion***

7. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hanh Phan whose telephone number is (571)272-3035.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Jason Chan, can be reached on (571)272-3022. The fax phone number for the organization where this application or proceeding is assigned is (571)273-8300.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703)305-4700.

  
**HANH PHAN**  
**PRIMARY EXAMINER**